

Oil & Gas Production

### BURKHALTER ENGINEERING, INC.

751 Horizon Ct., Suite 245 P.O. Box 60095 Grand Junction, Co 81506 Telephone (970) 243-6060 Fax (970) 243-6015 Mobile (970) 260-0765

December 23, 2004

RECEIVED

DEC 2 8 2004

DIV. OF OIL, GAS & MINING

Ms. Carol Daniels
Division of Oil, Gas & Mining
P.O. Box 145801
Salt Lake City, UT 84114-5801

Re: APD's

Nine San Arroyo Wells (All Federal) Grand County, UT

Dear Ms. Daniels:

Enclosed are complete copies of APD's filed with the Moab office of the BLM for Drilling Permits for the following Unit wells:

San Arroyo Unit #51 (Directional); All others, Vertical: San Arroyo Unit Nos. 52, 53, 54, 55, 56, 57, 58 and 59

Please have a look and assign API numbers. If you have questions, or need further information, please call.

Very truly yours,

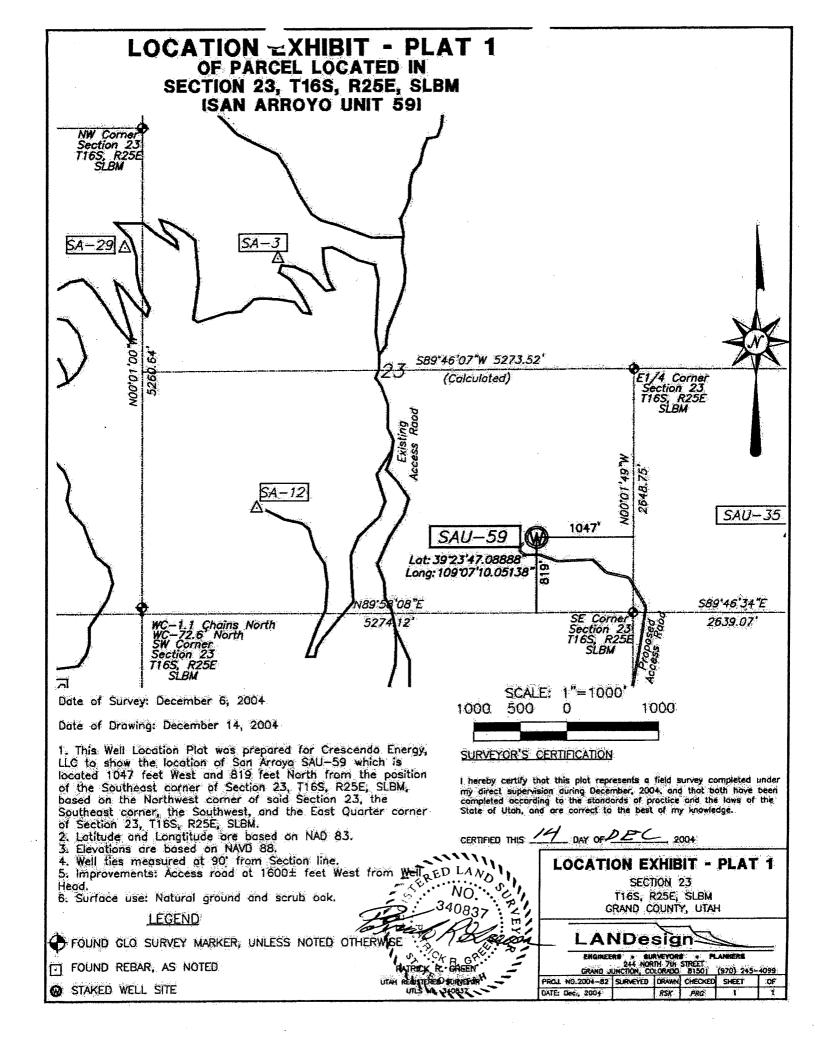
J. N. Burkhalter, PE

### \_RECEIVED DEC 2 8 2004

(April 2004)	L, GAS & MINING		FORM APPR OMB No. 100 Expires March	M-0137				
	UNITED STATES DEPARTMENT OF THE INTERIOR							
	BUREAU OF LAND MANAGEMENT  APPLICATION FOR PERMIT TO DRILL OR REENTER							
la. Type of work:  DRILL	REENTER		7 If Unit or CA Agreeme San Arroyo Unit	nt, Name and No.				
1b. Type of Well: Oil Well Gas Well O	ther Single Zo	ne Multiple Zone	8. Lease Name and Well San Arroyo Unit #					
2. Name of Operator Crescendo Energy, LLC			9. API Well No.	019-3142				
3a. Address P.O. Box 1814, Midland, TX 79702	3b. Phone No. (included 432-697-722)	ŕ	10. Field and Pool, or Expl					
4. Location of Well (Report location clearly and in accorda At surface 819 FSL, 1047 FEL		39.396427	11. Sec., T. R. M. or Blk. as	nd Survey or Area				
At surface 819 FSL, 1047 FEL 35 At proposed prod. zone Same as Surface	4362249Y		Sec 23, T16S, R25	E, SLM				
14. Distance in miles and direction from nearest town or post Approx 23 mi NW of Mack, CO			12. County or Parish  Grand	13. State UT				
15 Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No. of acres in 1		cing Unit dedicated to this well  Arroyo Unit					
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  2350	19. Proposed Depth 5920		20. BLM/BIA Bond No. on file BLM Bond 0437483					
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6653 Grnd	22 Approximate da 05/0	te work will start*	23. Estimated duration 3 to 4 weeks					
	24. Attachmen	ts						
The following, completed in accordance with the requirement  1. Well plat certified by a registered surveyor.  2. A Drilling Plan.  3. A Surface Use Plan (if the location is on National Fore SUPO shall be filed with the appropriate Forest Service O	st System Lands, the 5. Coffice).	Bond to cover the operatem 20 above).  Operator certification	this form: tions unless covered by an exis	•				
25. Signature M. B. untitath	Name (Printe J. N. E	d Typed) Surkhalter	Date / Z	/22/04				
Title Consulting Engineer/Agent								
Approved by (Signature)	Name (Printe BRAD	d/Typed) LEY G. HIL	L Dat	~ ~ ~				
		ENTAL SCIENTI						
Application approval does not warrant or certify that the app conduct operations thereon. Conditions of approval, if any, are attached.	licant holds legal or equitable ti	tle to those rights in the s	subject lease which would entitle	e the applicant to				
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, n States any false, fictitious or fraudulent statements or representations.	nake it a crime for any person kintations as to any matter within its	nowingly and willfully to s jurisdiction.	o make to any department or ag	ency of the United				

\*(Instructions on page 2)









Petroleum and Energy Consultants Registered in Rocky Mountain States Oil & Gas Production

### BURKHALTER ENGINEERING, INC.

751 Horizon Ct., Suite 245 P.O. Box 60095 Grand Junction, Co 81506 Telephone (970) 243-6060 Fax (970) 243-6015 Mobile (970) 260-0765

January 4, 2005

Ms. Diana Whitney
Division of Oil, Gas & Mining
P.O. Box 145801
Salt Lake City, UT 84114-5801

Re: APD's

Exception Locations SA Unit Nos. 53, 54, 55, 56, 58 and 59 Grand County, UT

Dear Ms. Whitney:

The referenced locations are an exception to Rule R649-3-3 due to topography. All the leases are 100% owned and 100% operated within 460' of each location by Crescendo Energy, LLC. No other owners or operators are involved.

These locations were chosen in an attempt to drill a viable down-hole location and because of the rough topography in the San Arroyo area. Much work and planning has gone into these locations, first to drill a down-hole location with a good chance of economical production, then an attempt to match it with an acceptable and buildable location.

Please call if you have other concerns.

Very truly yours,

J. N. Burkhalter PF

cc: Jim Osborne

### **SAN ARROYO UNIT #59**

### FEDERAL LEASE

### 1. DRILLING PLAN

a. Name of Well: San Arroyo Unit #59

b. Surface Location of Well: 819 FSL, 1047 FEL, Sec 23, T16S, R25E, SLM

Grand County, Utah

c. Federal Lease No. UTSL-071307

d. Ungraded ground elevation: 6653' above sea level

e. The surface formation: Cretaceous Mesa Verde

f. **Drilling Equipment:** Rotary drilling equipment will be used to drill the well to a TD of 4730' TVD and run casing. Standard 9" 3000 lb BOP double ram stack will be employed. A completion rig will be employed to complete the well.

g. The Total Depth of the well is planned to be 5920'.

h. Tops of Geologic Markers:

Surface: Mesa Verde Formation
Castle Gate 1185
Dakota 4782
Cedar Mountain 4904
Morrison 5031
Entrada 5822
Total Depth 5920

i. Estimated depths of fluid-bearing formations:

Castle Gate: gas/water 1185 Dakota: gas/water 4782

Cedar Mountain: gas/water 4904

Morrison: gas/water 5031

Entrada: 5822

j. The primary geologic objective is:

Dakota/Morrison/Entrada: 4782 to 5840

#### k. Casing:

Surface: A 12 1/4" surface hole will be drilled to 250' and 8 5/8" 36 lb new J55, API 8rnd ST&C csg will be run to 250' and cemented to surface with 150 sx regular cement mixed as follows: Class "G" (regular) cement containing 2% CaCl, 1/8 lb/sk Floseal, density 15.6 lb/gal, yield 1.18 cuft/sk. Cement will circulate.

Well: San Arroyo Unit #59

Intermediate: An 8 3/4" hole will be drilled through Castlegate to approximately 1300' depending on geology and 7" 23 lb new J55, API 8rnd ST&C csg will be run and cemented with 100 sx Halliburton Light Cement containing 23.5 lb/sk Class "G" cement, 52.375 lb/sk Poz, 7.64 lb/sk Lime, 6.11 lb/sk GeI, 0.25 lb/sk poly-e-flake. Slurry weight 11.00 lb/gal, yield 2.73 cuft/sk. Cement to surface.

Production: A 6 1/2" hole will be drilled to projected depth of 5920'± depending on geology, and 4 ½" 11.6 lb new J55 API 8rnd ST&C csg will be run to TD and cemented with 125 sx thixotropic cement comprised of Class "G" (regular) cement containing 10.0 lb/sk Calseal, 0.2 lb/sk Halad 344, 5 lb/sk gilsonite, density 14.2 lb/gal, yield 1.44 cuft/sk to cover all possible porous zones with a minimum of 200' of cement.

- I. **Pressure Control:** A standard 9" 3000 lb double ram BOP will be flanged up and tested initially and monthly thereafter to TD. Rams will be operated during trips.
- m. **Mud Program:** Fresh gel mud consisting of native clays, fresh water and bentonite will be used for the surface hole. Mud with at least 2% KCl (potassium chloride) will be used for the intermediate and production holes.
- n. Testing, Logging and Coring Programs:

<u>Testing</u>: If returns indicate the need for a DST, testers will be called. <u>Mud Logging</u>: A mud logging unit will be employed from 100' above the Castlegate.

Open Hole Logging: Electric and porosity logs will be run in open hole after intermediate casing depth is reached and after TD is reached.

<u>Cased Hole Logging:</u> A Gamma ray correlation and cement bond log will be run prior to perforating in cased hole.

Coring Program: No coring is planned for this well.

- o. **No abnormal pressures** or H<sub>2</sub>S is anticipated in this well. Bottom Hole Pressure is estimated to be 1800 psi.
- p. **Anticipated spud date** is May 1, 2005. Drilling time will be approximately three weeks from spud to move off of the drilling rig.
- 2. **BOP TEST PROCEDURES:** Immediately after nippling up the double ram BOP to the surface pipe, professional testers will be called to the location and BOP tested to 2500 psi, both sets of rams and flanges.

### 3. MULTI-POINT SURFACE USE PLAN (13-Point Plan)

a. **The land survey** for the location was performed by LANDesign of Grand Junction, Colorado. Cultural resources were cleared by Mike Piontkowski of Uncompangre Archaeological Consultants, Grand Junction, CO.

- b. (See Map) To reach the location from Mack, CO, proceed westerly on old Hwy 6 approximately 10.0 miles to San Arroyo Road, turn right (north), stay on main traveled road for approximately 13.5 mi to turn right for San Arroyo Well #20. Travel to SA #20 where 2500' Access Road for SA #59 begins.
- c. **Access Road:** See Map. Approximately 2500' of Access Road will be required for this well.
- d. **Planned Access Road:** Approximately 2500' of Access road is planned for this location. The Access road begins at San Arroyo Well #20 and will follow the terrain to the location with no grades over 8%.
- e. Wells within a one-mile radius of proposed well:
- 1) There are no known water wells within the one-mile radius.
- 2) There is one (1) known P&A well within the one-mile radius. NWSESW Sec 24, T16S, R25E, SLM
- 3) There are no known salt water disposal wells in the one-mile radius
- 4) There are eight (8) known producing wells in the one-mile radius:

NESENW Sec 26(2 Wells), T16S, R25E, SLM SWSW Sec 23, T16S, R25E, SLM

NWSENW Sec 23(2 Wells), T16S, R25E, SLM

SWSE Sec 14, T16S, R25E, SLM

NWSESW Sec 24, T16S, R25E, SLM

NESENE Sec 26, T16S, R25E, SLM

- 5) There are no known currently permitted wells in the one-mile radius.
- 6) There are no known monitoring wells in the one-mile radius
- f. **Production facilities** such as separators, dehydrators, flow meters and tanks will be located on the disturbed portion of the well pad. If gravel is needed for foundation under tanks or gas processing equipment, it will be hauled in. All other material will be obtained from the site such as dirt for the dikes around tanks.
- g. **Above ground structures** will be painted according to BLM selected colors. BLM states colors will be selected at onsite and included in stipulations with permit.
- h. **Reserve Pit:** Will be fenced on three sides during drilling. After the drilling rig is moved out, Reserve Pit will be fenced on fourth side and fence maintained for the life of the pit until final reclamation.

- i. Tanks or Tank Batteries: A tank or tank battery will be surrounded by an impervious dike of sufficient size and height to contain 110% of the largest tank in the battery.
- j. **If any oil/liquid hydrocarbons** resulting from drilling or completion end up in the pit, the pit will be flagged/netted.
- k. Off-Site Facilities: No off-drill pad facilities are anticipated for the well. Condensate will be stored on the drill pad and gas piped off to the sales pipeline nearby.
- I. **Proposed Pipeline Facilities:** The Sales Gas line will be installed to the east, staying on the Access Road and hook up to existing pipeline in Sec 22. After completion and testing, a Sundry Notice will be filed describing the pipeline needed to produce this well.
- m. Location and Type of Water Supply: Water for mixing drilling mud and cement will be trucked from the Ute Water facility at Mack, CO, approximately 30 miles from the location. Ute water is purified domestic water and will not cause any deleterious affects to the environment. Water will be bought under Ute Water Permit No. B004.
- n. **Source of Construction Materials:** No material will be removed from Federally owned sources. If gravel is needed for foundation under production facilities, there are several commercial gravel pits in the area. The dike around the tank will be constructed from dirt found on the location.
- o. **Methods of handling waste disposal:** Design of pit and its usage. Sewage disposal. Garbage and trash handling.
  - A. The reserve pit will be designed to prevent the collection of surface runoff. The pit will be lined with a 12-mil or thicker polyethylene to prevent leakage of fluids. The liner will be rolled in place and recurred at the ends, i.e. buried on the top of the pit berms. Prior to use, the reserve pit will fenced "stock tight" on three sides, the fourth side will be fenced at the time of rig release and removal, at which time the pit will be flagged. Drilling fluids and cuttings will be constrained in the reserve pit.
    - Fluids in the reserve pit will be allowed to evaporate prior to being backfilled. Pit will remain fenced until backfilled.
  - B. Produced liquid hydrocarbons will be constrained in test tank(s) during completion and testing.
  - C. Sewage will be handled in self-contained, chemically treated portable toilets and contents hauled off location to an authorized facility in accordance with State and local regulations.

- D. Garbage and other trash will be contained in an acceptable trash receptacle, which will be enclosed. Refuse will be transported to an approved sanitary landfill upon completion of operations.
- E. Trash will be picked up if scattered and contained in receptacles during drilling/completion/construction operations.
- p. Ancillary Facilities: None Required.
- q. **Well site layout** including plats, cuts, fills, cross sections, parking for vehicles, top soil storage, location of pits including reserve pit, erosion control.
  - A. See Survey Plats.
  - B. Cut and fill cross sections indicated on survey exhibits. Sufficient material will be available to backfill the reserve pit after drilling and completion activities.
  - C. All equipment will be confined to the access road, pad and areas specified in the APD.
  - D. Prior to construction, all topsoil will be removed from the entire site and stockpiled as directed by the BLM during the onsite. Topsoil will be stripped to a depth of 6 to 8 inches where possible.
  - E. Soil material and overburden will not be pushed over side slopes or into drainages. All soil material disturbed will be placed in an area where it can be retrieved.
  - F. The location (including reserve pit) will be designed to prevent the collection of surface runoff.
  - G. Adequate erosion control barriers will be installed at the drill pad to minimize storm water runoff. Water drainage upslope from the drill pad will be addressed at the time of construction to keep it from ponding on the pad.

#### r. Surface Reclamation Plans:

- A. Rat and mouse holes will be backfilled and compacted from bottom to top immediately upon release of the drilling rig from the location.
- B. Backfilling of the pit will be done when the contents have been sufficiently dewatered.
- C. Production Operations:
  - a. If the well is productive, areas not required for operations will be contoured and water barred to support vegetation and reduce erosion. All disturbed areas will be seeded with seed mixture prescribed by BLM. Seeding will be done after September 15<sup>th</sup> and/or prior to ground frost or seed will be planted after the last frost and before May 15<sup>th</sup>. Slopes too steep for machinery will be hand broadcast and raked with twice the specified amount of seed.
  - b. Noxious weeds will be controlled on the location in accordance with BLM guidelines.

c. Rehabilitation will begin upon the completion of the well. Complete rehabilitation will depend on weather conditions and the amount of time required to sufficiently dewater the reserve pit.

### s. Abandoned Well Plans:

- A. In the event of a dry hole, the location will be re-contoured, the top soil will be distributed evenly over the entire location. The seed bed will be prepared by disking to a depth of four(4) to six(6) inches following the contour. Seed will be drilled on the contour to a depth of 0.5 inches, followed by cultipaction to compact the seed bed, preventing soil loss. Certified seed will be used with a minimum germination rate of 80% and minimum purity of 90%.
- B. Water bars, either for a producing well or a dry hole, will be constructed at least one(1) foot deep on the contour with approximately two(2) feet of drop per 100 feet of waterbed to ensure drainage and extend into established vegetation. All water bars will be constructed with berm on the downhill side to prevent erosion from occurring and sitting in the trench.

Water bar spacing on the location will be as follows:

% Slope	Spacing Interval
2 or <	200'
2 to 4	100'
4 or 5	75'
5 or >	50'

C. Notice of Intent to Abandon and Subsequent Report of Abandonment will be submitted for approval.

### t. Surface Ownership and ROW Ownership:

Surface Ownership: U.S. Department of Interior, Bureau of Land Management

ROW Ownership: U.S. Department of Interior, Bureau of Land Management

#### u. Other:

A. Cultural Resource Inventory: A Class III Cultural Resource Inventory has been conducted by Mike Piontkowski of Uncompangre Archaeological Consultants.

The survey finding was that <u>no cultural resources were found on or near the location.</u>

- B. Surface use of Area: Surface use of area is for grazing livestock and production of oil & gas.
- C. Fire Suppression: Operator will be responsible for the prevention and suppression of fires on public lands caused by its employees, contractors, or subcontractors.

Page 7 Drill Plan San Arroyo Unit #59

D. Hazmat: Operator maintains a file, per 29 CFR 1910.1200 (g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds and/or substances which are used during the course of construction, drilling, completion and production operations for this project. Hazardous materials (substances) which may be transported across these lands may include drilling mud, cementing products which are primarily inhalation hazards, fuels (flammable and/or combustible), materials that may be necessary for well completion/stimulation activities such as flammable or Combustible products and acids/gels (corrosives).

The opportunity for Superfund Amendments and Reauthorization ACT (SARA) listed Extremely Hazardous Substances (EHS) at the site is generally limited to proprietary treating chemicals. All hazardous substances, EHS, and commercial preparations will be handled in an appropriate manner to minimize the potential for leaks or spills to the environment.

### u. Operators Representative and Address and a Certification:

J. N. Burkhalter
Consulting Engineer/Agent for
Crescendo Energy, LLC
P.O. Box 60095
Grand Junction, CO 81506
Office: 970-243-6060; Cell: 970-260-0765

CERTIFIFCATION: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Crescendo Energy, LLC is considered to be the operator of the subject well. Crescendo Energy, LLC agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

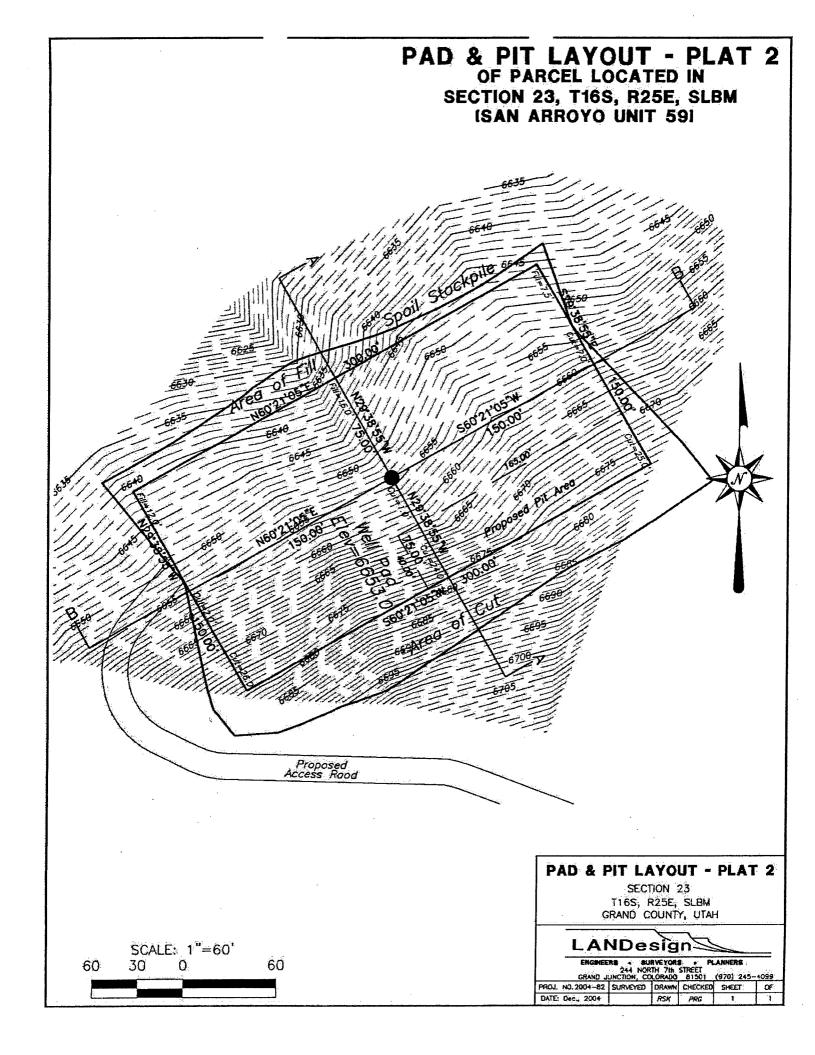
Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by BLM Utah Statewide Bond No. 0437483.

Page 8 Drill Plan San Arroyo Unit #59

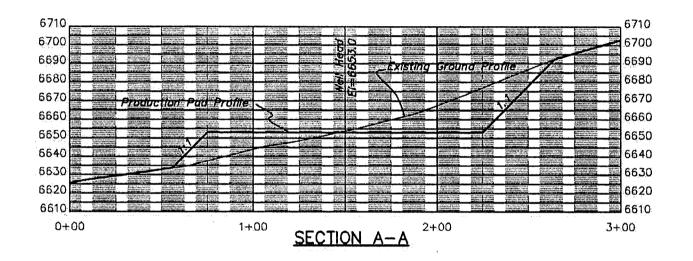
I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Operator, its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

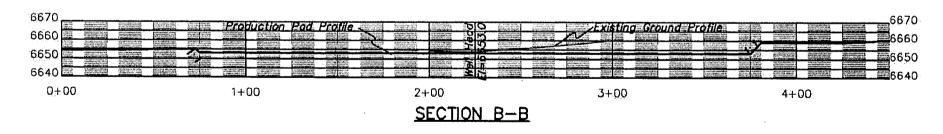
4. Plats/Maps Provided:

- a. Plat 1: Certified Location Plat
- b. Plat 2: Pit and Pad Layout
- c. Plat 3: Pit & Pad Cross Section
- d. Plat 4: Rig Layout
- e. Platt 5: Topo & Access
- f. Road Map
- g. One Mile Radius Map
- h. Schematic of BOPE



## PAD & PIT CROSS SECTION - PLAT 3 OF PARCEL LOCATED IN SECTION 23, T16S, R25E, SLBM (SAN ARROYO UNIT 59)





SCALE: 1"=50' H SCALE: 1"=50' V

### PAD & PIT CROSS SECTION PLAT 3

SECTION 23 T16S, R25E, SLBM GRAND COUNTY, UTAH

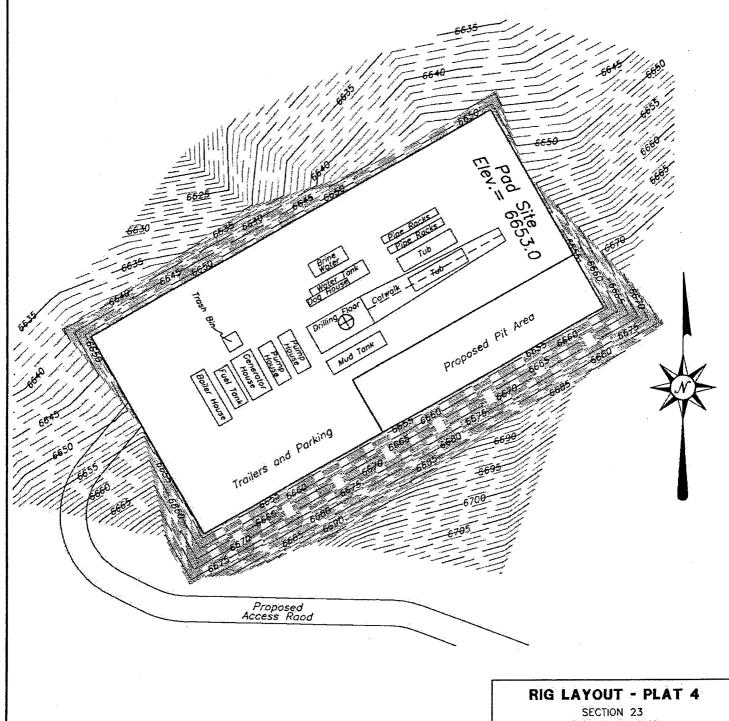
### LANDesign

EMGREERS - SURVEYORS - PLANMERS

244 NORTH 7th STREET
GRAND JUNCTION, COLORADO 81501 (970) 245-4099

PROJ. NO. 2004-82 SURVEYED DRAWN CHECKED SHEET OF
DATE: Dec., 2004 RSK PRG 1

### RIG LAYOUT - PLAT 4 OF PARCEL LOCATED IN SECTION 23, T16S, R25E, SLBM **ISAN ARROYO UNIT 591**



Ground Level = 6653.0

Drilling Floor = 6666.0

Kelley Bushing = 6667.0

SCALE: 1"=60'

60

30

60

T16S, R25E, SLBM GRAND COUNTY, UTAH

### LANDesign<sup>®</sup>

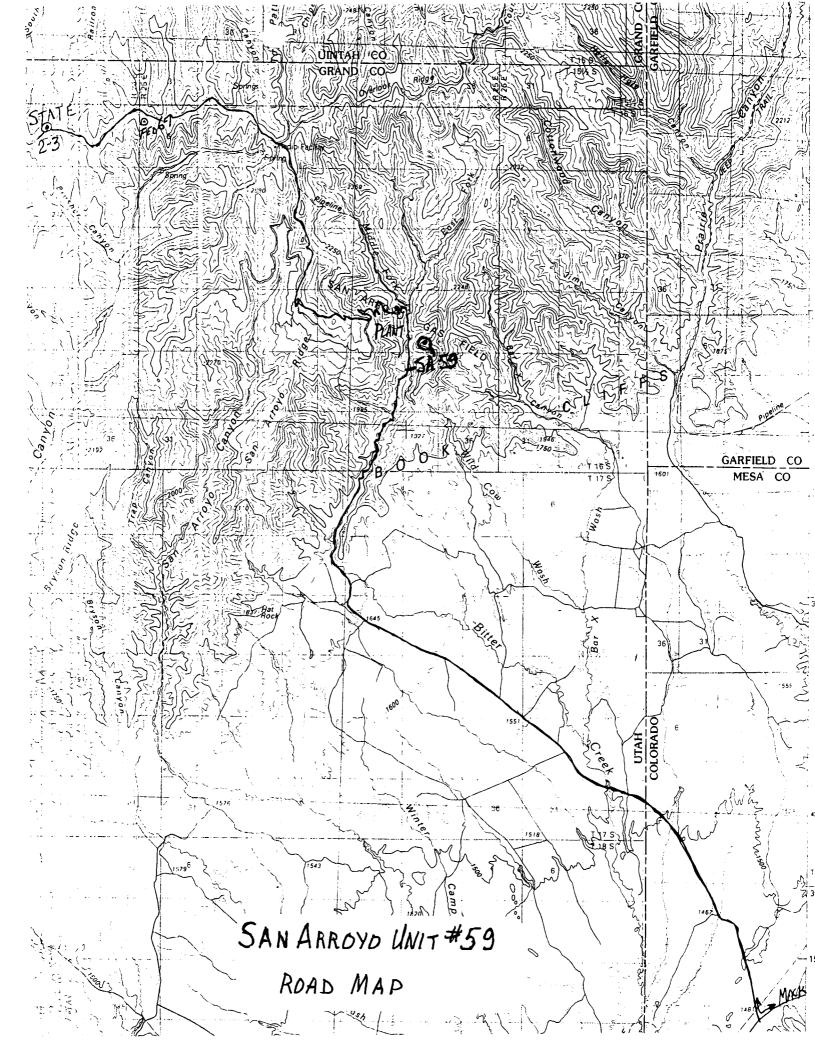
ENGINEERS SURVEYORS PLANNERS

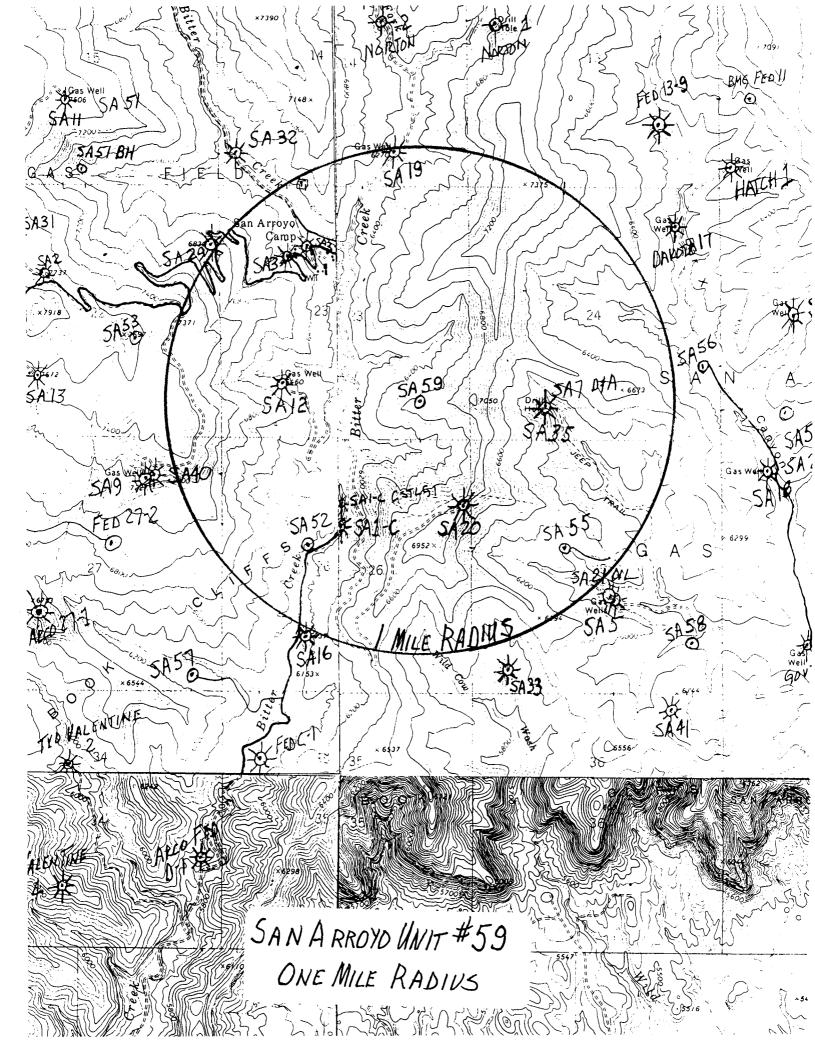
244 NORTH 7th STREET

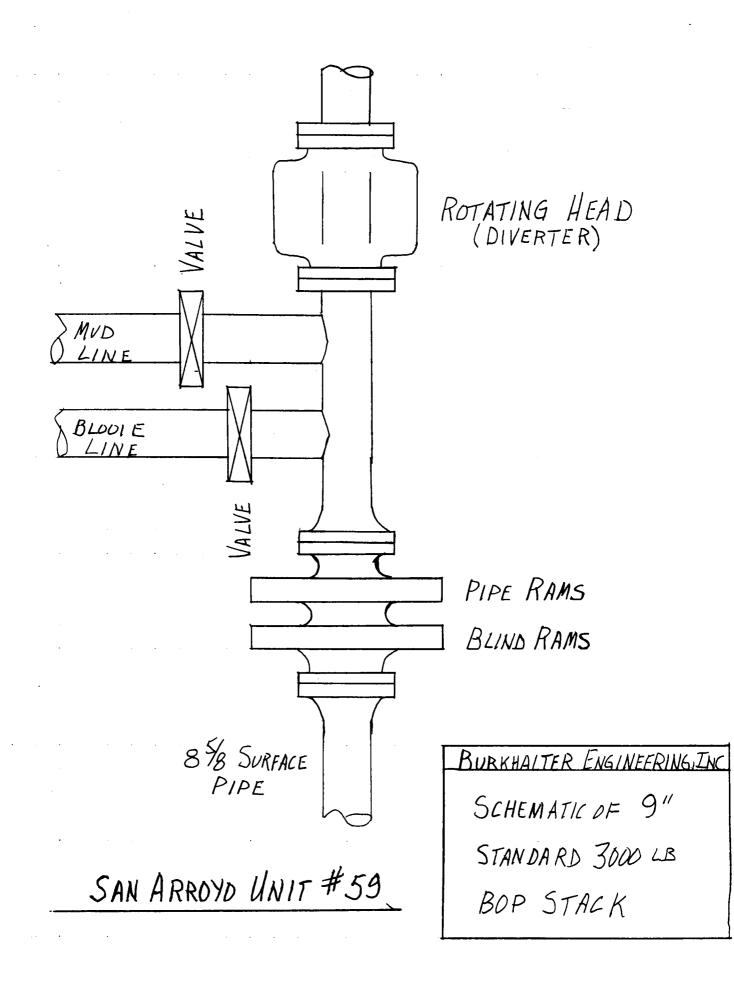
GRAND JUNCTION, COLORADO 81501 (970) 245

PROJ. NO.2004-82 SURVEYED DRAWN CHECKED SHEET DATE: Dec., 2004

## **TOPOGRAPHY & ACCESS EXHIBIT - PLAT 5** OF PARCEL LOCATED IN SECTION 23, T16S, R25E, SLBM (SAN ARROYO UNIT 59) NW Corner Section 23 San Arrbyo S89'46'34"E 2639.07 **TOPOGRAPHY & ACCESS** EXHIBIT - PLAT 5 SECTION 23 T16S, R25E, SLBM GRAND COUNTY, UTAH LANDesign > SCALE: 1"=1000' ENGINEERS - SURVEYORS - PLAINERS 244 NORTH 7th STREET CRAND JUNCTION, COLDRADO 81501 (970) 245-4099 PROJ. NO.2004-82 SURVEYED DRAWN CHECKED SHEET OF DATE: Dec., 2004 RSK PRG 1 1 1000 500 1000 0

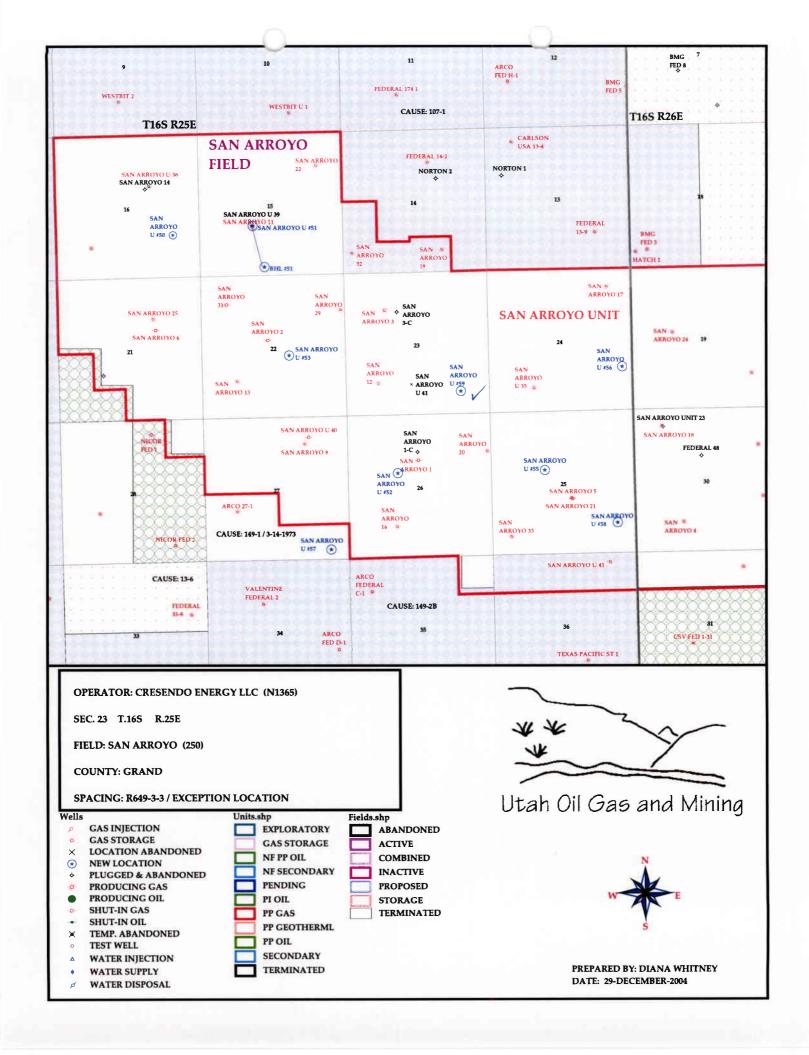






### WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 12/28/2004	API NO. ASSIGNED: 43-019-31427
WELL NAME: SAN ARROYO U #59  OPERATOR: CRESCENDO ENERGY LLC ( N1365 )  CONTACT: J.N. BURKHALTER	PHONE NUMBER: 432-697-7221
PROPOSED LOCATION: SESE 23 160S 250E	INSPECT LOCATN BY: / /
SURFACE: 0819 FSL 1047 FEL BOTTOM: 0819 FSL 1047 FEL	Tech Review Initials Date
GRAND SAN ARROYO ( 250 )	Engineering Geology
LEASE TYPE: 1 - Federal LEASE NUMBER: UTSL-071307	Surface
SURFACE OWNER: 1 - Federal PROPOSED FORMATION: ENRD COALBED METHANE WELL? NO	LATITUDE: 39.39643 LONGITUDE: -109.1188
RECEIVED AND/OR REVIEWED:  ✓ Plat  ✓ Bond: Fed[1] Ind[] Sta[] Fee[]  (No. 0437483 )  N Potash (Y/N)  N Oil Shale 190-5 (B) or 190-3 or 190-13  ✓ Water Permit  (No. B004 )  RDCC Review (Y/N)  (Date: )  N Fee Surf Agreement (Y/N)	LOCATION AND SITING:  R649-2-3. Unit SAN ARROYO  R649-3-2. General     Siting: 460 From Qtr/Qtr & 920' Between Wells  R649-3-3. Exception  Drilling Unit     Board Cause No:     Eff Date:     Siting:  R649-3-11. Directional Drill
STIPULATIONS:  1- Calle (	Apprino C



### **United States Department of the Interior**

### **BUREAU OF LAND MANAGEMENT**

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

December 30, 2004

#### Memorandum

To: Assistant District Manager Minerals, Moab District

From: Michael Coulthard, Petroleum Engineer

Subject: 2004 Plan of Development San Arroyo Unit,

Grand County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2004 within the San Arroyo Unit, Grand County, Utah.

API # WELL NAME LOCATION

(Proposed PZ Morrison)

43-019-31425 San Arroyo Unit # 51 Sec 15 T16S R25E 1850 FSL 1984 FWL

BHL Sec 15 T16S R25E 0324 FSL 2380 FWL

43-019-31426 San Arroyo Unit # 53 Sec 22 T16S R25E 2296 FSL 2061 FEL 43-019-31428 San Arroyo Unit # 56 Sec 24 T16S R25E 1605 FSL 0377 FEL 43-019-31429 San Arroyo Unit # 58 Sec 25 T16S R25E 1093 FSL 0659 FEL

43-019-31429 San Arroyo Unit # 55 Sec 25 T16S R25E 1093 FSL 0039 FEL 43-019-31430 San Arroyo Unit # 55 Sec 25 T16S R25E 2192 FNL 1984 FWL

43-019-31431 San Arroyo Unit # 52 Sec 26 T16S R25E 2179 FNL 1850 FWL 43-019-31433 San Arroyo Unit # 54 Sec 19 T16S R26E 0651 FSL 1383 FWL

(Proposed PZ Entrada)

43-019-31427 San Arroyo Unit # 59 Sec 23 T16S R25E 0819 FSL 1047 FEL

This office has no objection to permitting the wells at this time.



State of Utah

Department of Natural Resources

ROBERT L. MORGAN Executive Director

Division of Oil, Gas & Mining

MARY ANN WRIGHT Acting Division Director

OLENE S. WALKER

GAYLE F. McKEACHNIE

January 5, 2005

Crescendo Energy, LLC P O Box 1814 Midland, TX 79702

Re: San Arroyo Unit #59 Well, 819' FSL, 1047' FEL, SE SE, Sec. 23, T. 16 South, R. 25 East, Grand County, Utah

### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-019-31427.

\_S<del>ince</del>rely,

John R. Baza Associate Director

pab

Enclosures

cc: Grand County Assessor

Bureau of Land Management, Moab District Office



Operator:		Crescendo Energy, LLC						
Well Name & Number	<del></del>	San Arroyo Unit #59						
API Number:		43-019-31427						
Lease:		UTSL-071307						
Location: <u>SE SE</u>	Sec. 23	<b>T.</b> <u>16 South</u>	R. <u>25 East</u>					

### **Conditions of Approval**

### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

### 2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dan Jarvis at (801) 538-5338

### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

### STATE OF UTAH

**DEPARTMENT OF NATURAL RESOURCES** 

APPROVED 1/139105 RECEIVED		**************************************
SUNDRY NOTICES AND REPORTS ON WELLS  OF YELL DE TOTAL SPRONGE IS SETTION. SPRINGER, SPRINGER, SETTION CONTINUE. AND	DIVISION OF OIL, GAS AND MINING	
Do not use the form for proposals to ded nor wells, significantly determinating wells below curried bottom-hole depth, moreor plugged wells or to deliberate with the APPLICATION PRIVATE TO BILL them for such proposals.  1 TYPE OF WELL OIL WELL GAS WELL OTHER Sea Attroyo Unit and other wells  1 TYPE OF WELL OIL WELL GAS WELL OTHER Sea Attroyo Unit and other wells  2 NAME OF CREATORS  3 NAME OF CREATORS  3 NAME OF CREATORS  4 LOCATION OF WELL  4 LOCATION OF WELL  4 LOCATION OF WELL  5 CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  1 TYPE OF SUBMISSION  1 TYPE OF SUBMISSION  1 TYPE OF SUBMISSION  1 TYPE OF SUBMISSION  1 NOTICE OF INTENT  (OWNER DAUGHER)  APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  1 TYPE OF SUBMISSION  1 TYPE OF SUBMISSION  1 TYPE OF SUBMISSION  1 TYPE OF ACTION  1 DESCRIBE PROPOSED OR COMPLETE OPERATORS  2 SUBSCOLLENT REPORT  (OWNER DAUGHER)  3 SUBSCOLLENT REPORT  (OWNER DAUGHER)  4 CHARGE WELL STATUS  CHARGE WELL STATUS	SUNDRY NOTICES AND REPORTS ON	
San Arroyo Unit and other wells  TYPE OF MELT.  OIL WELL   GAS WELL   OTHER   Sea attached  2. NAME OF OPERATOR: Slate RIVER RESOURCES, LLC  3. ACKRESS OF OPERATOR: 4.16 Main Street, Sin: 18 CHY Vernal STATE UT		
Summer or prepartors  Slate River Resources, LLC  N 2 73.5  Sale attached  1. PATRICE See attached  1. Addressor of prepartors  Slate River Resources, LLC  N 2 73.5  See attached  1. Addressor of prepartors  See attached  1. Addressor of prepartors  See attached  1. Addressor of prepartors  See attached  1. LOCATORIO OF WELL  1. LOCATORIO OF WELL  1. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  TYPE OF ACTION    NOTICE OF NITENT   Addressor   Repersor of Control of See See See See See See See See See Se	drill nonzontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for su	
Solate River Resources, LLC    ADDRESS OF OPERATOR:   Solate River Resources, LLC   Solate River		
A LOCATION OF WELL  FOOTAGES AT SURPACE: See attached schedule of wells  COUNTY: Grand  CITIZATE, EECTION, TOWNSHIP, PANNEE, MERCIDIN.  TYPE OF SUBMISSION  NOTICE OF HYTENT OLIGINATION OF WELL  TYPE OF SUBMISSION  NOTICE OF HYTENT OLIGINATION OF WELL  ADDRESSOURN'S REPORT OR OTHER DATA  TYPE OF SUBMISSION  NOTICE OF HYTENT OLIGINATION OF WELL  APPROVINGIBLE OF MATERIAL OR OTHER OR OTHER OF NOTICE, REPORT, OR OTHER DATA  TYPE OF SUBMISSION  NOTICE OF HYTENT OLIGINATION OF HARMS  CHANGE WELL NAME  CHANGE WELL TYPE  RECOMMENT. DEPORTIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  Crescendo Energy, LLC is a wholly owned subsidiary of Slate River Resources, LLC. All the wells, properties and leasehold interest of Crescendo Energy, LLC to Slate River Resources, LLC on the wells listed on the attached schedule, including a change of Operator of the San Arroyo Unit Area effective November 1, 2005.  The Bond numbers for Slate River Resources, LLC and Well State River Resources, LLC  Crescendo Energy, LLC to Slate River Resources, LLC and Well State River Resources, LLC  Crescendo Energy, LLC  N 1365  LANGE PELOSE PRINT, Gary D. Davis  TILLE  President, Slate River Resources, LLC  Crescendo Energy, LLC  N 1365  LANGE PELOSE PRINT, Gary D. Davis  TILLE  President, Slate River Resources, LLC  APPROVED  LIJAMAGE  APPROVED  LIJAMAGE  APPROVED  LIJAMAGE  APPROVED  LIJAMAGE  THE PRESIDENT  THE President, Slate River Resources, LLC  APPROVED  LIJAMAGE  APPROVED  LIJAMAGE  APPROVED  LIJAMAGE  THE PRESIDENT  SERTARCH SANDER  SERTARCH  SERTARCH  SEMENTACH  STATE  UTAH  LITHE  HITH  THE PRESIDENT  THE PRESID		
418 Main Street, Ste. 18 CTV. Vernel STATE UT DIE 84078 (435) 781-1870 See attached 4 COCATION OF WELL 5 COUNTY Grand 5 COUNTY	Slate River Resources, LLC N2725	
APPROVED LIGH.  COUNTY Grand  CASHOC GRANG		
OTROTR. SECTION, TOWNSHIP, RANCE, MERIDAN  11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  17YPE OF SUBMISSION    ACIDIZE		(100) FOT 1010
TYPE OF SUBMISSION    ACDIZE   DEEPEN   REPERFORATE CURRENT FORMATION	FOOTAGES AT SURFACE: See attached schedule of wells	COUNTY: Grand
TYPE OF SUBMISSION  TYPE OF SUBMISSION  TYPE OF ACTION    NOTICE OF INTENT   ACIDIZE	QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:	
TYPE OF SUBMISSION  TYPE OF ACTION    NOTICE OF INTENT   ACIDIZE   DEEPEN   REPREPORATE CURRENT FORMATION	11. CHECK APPROPRIATE BOXES TO INDICATE NAT	
NOTICE OF INTENT   ACIDIZE   DEEPEN   REPERFORATE CURRENT FORMATION		
Approximate date work will start  Approximate date work will start  Approximate date work will start  CASING REPAIR  CHANGE REPAIR  CHANGE OF PREVIOUS PLANS  CHANGE VELLS TO PREVIOUS PLANS  CHANGE WELL STATUS  CHANGE OF PALT WELL STATUS  CHANGE OF PLATICOS  CHANGE WELL STATUS  CHANGE OF PALT WELL STATUS  CHANGE OF PLATICOS  CHANGE WELL STATUS  CHANGE OF PACTURES  CHANGE OF PLATICOS  CHANGE WELL STATUS  CHANGE OF PACTURES  CHANGE OF PLATICATION  CHANGE TUBING  CHANGE WELL STATUS  CHANGE OF PLATICATION  CHANGE TUBING  CHANGE TUBING  CHANGE WELL STATUS  CHANGE OF PACTURES  CHANGE OF	NOTICE OF INTENT	
OHANGE TO PREVIOUS PLANS   OPERATOR CHANGE   TUBING REPAIR	- (Outline to the Double of the Color	RACTURE TREAT SIDETRACK TO REPAIR WELL
SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion:    CHANGE WELL NAME   PLUG BACK   WATER DISPOSAL	Approximate date work will start: CASING REPAIR N	EW CONSTRUCTION TEMPORARILY ABANDON
SUBSEQUENT REPORT (Submit Original Fam Chily) Date of work completion:    CHANGE WELL STATUS	CHANGE TO PREVIOUS PLANS	PERATOR CHANGE TUBING REPAIR
CHANGE WELL STATUS	CUBEFOLIENT BEDOOT	<u> </u>
Date of work completion:    COMMINDLE PRODUCING FORMATIONS   RECLAMATION OF WELL SITE   OTHER:   CONVERT WELL TYPE   RECOMPLETE - DIFFERENT FORMATION	(Submit Original Form Only)	
DONNERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION  12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  Crescendo Energy, LLC is a wholly owned subsidiary of Slate River Resources, LLC. All the wells, properties and leasehold interest of Crescendo Energy, LLC has been assigned to Slate River Resources, LLC. We request a change of Operator from Crescendo Energy, LLC to Slate River Resources, LLC on the wells listed on the attached schedule, including a change of Operator of the San Arroyo Unit Area effective November 1, 2005.  The Bond numbers for Slate River Resources, LLC are: State of Utah DOGM Bond B001556 \$120,000 State of Utah Bond of Lessee B001760 \$15,000 being transferred from Crescendo to Slate River Resources, LLC Federal Utah Statewide Bond UTB000187 \$25,000 being transferred from Crescendo to Slate River Resources, LLC  Crescendo Energy, LLC  N 1365  Carter G. Mathies, President  NAME (PLEASE PRINT) Gary D. Davis  TITLE President, Slate River Resources, LLC  SIGNATURE  DATE PROVED  APPROVED  APPROVED  APPROVED  APPROVED  APPROVED  RECEIVED	Date of work completion:	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  Crescendo Energy, LLC is a wholly owned subsidiary of Slate River Resources, LLC. All the wells, properties and leasehold interest of Crescendo Energy, LLC has been assigned to Slate River Resources, LLC. We request a change of Operator from Crescendo Energy, LLC to Slate River Resources, LLC on the wells listed on the attached schedule, including a change of Operator of the San Arroyo Unit Area effective November 1, 2005.  The Bond numbers for Slate River Resources, LLC are: State of Utah DOGM Bond B001556 \$120,000 \$15,000 being transferred from Crescendo to Slate River Resources, LLC Federal Utah Statewide Bond UTB000187 \$25,000 being transferred from Crescendo to Slate River Resources, LLC  Crescendo Energy, LLC N 1365  Carter G. Mathies, President  NAME (PLEASE PRINT) Gary D. Davis  TITLE President, Slate River Resources, LLC  SIGNATURE DATE N 139165  RECEIVED  APPROVED 1139165		Onick.
Crescendo Energy, LLC is a wholly owned subsidiary of Slate River Resources, LLC. All the wells, properties and leasehold interest of Crescendo Energy, LLC has been assigned to Slate River Resources, LLC. We request a change of Operator from Crescendo Energy, LLC to Slate River Resources, LLC on the wells listed on the attached schedule, including a change of Operator of the San Arroyo Unit Area effective November 1, 2005.  The Bond numbers for Slate River Resources, LLC are: State of Utah DOGM Bond B001556 \$120,000 State of Utah Bond of Lessee B001760 \$15,000 being transferred from Crescendo to Slate River Resources, LLC Federal Utah Statewide Bond UTB000187 \$25,000 being transferred from Crescendo to Slate River Resources, LLC  Crescendo Energy, LLC  N 1365  Carter G. Mathies, President  TITLE  President, Slate River Resources, LLC  11/10/2005  This space for State use only)  RECEIVED		
State of Utah DOGM Bond State of Utah Bond of Lessee Federal Utah Statewide Bond UTB000187 \$ 15,000 being transferred from Crescendo to Slate River Resources, LLC Federal Utah Statewide Bond UTB000187 \$ 25,000 being transferred from Crescendo to Slate River Resources, LLC Crescendo Energy, LLC    N 1365	Crescendo Energy, LLC is a wholly owned subsidiary of Slate Rivinterest of Crescendo Energy, LLC has been assigned to Slate Riccescendo Energy, LLC to Slate River Resources, LLC on the we	rer Resources, LLC. All the wells, properties and leasehold ver Resources, LLC. We request a change of Operator from ells listed on the attached schedule, including a change of
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Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

DIV. OF OIL, GAS & MINING

### SLATE RIVER RESOURCES, LLC, OPERATOR

April Olivery		***	Sector Torrespondences	- 10000 0000000000000000000000000000000							
		Well Name		Well Status	Field Name	County Name	Qtr/Qti	Section	Township-Range	2.2	PNL
	CRESCENDO ENERGY LLC	ARCO 27-1	Gas Well	Producing	SAN ARROYO	GRAND	NWSW	27	16S-25E	U-29645	170
	CRESCENDO ENERGY LLC	ARCO STATE 36-7	Gas Well	Producing	EAST CANYON	GRAND	SWSE	36	15.5S-24E	ML-22208	852
43-019-31192-00-0		ARCO STATE 36-8	Gas Well	Producing	EAST CANYON	GRAND	swsw	36	15.5S-24E	ML-22208	128
43-019-30240-00-0	CRESCENDO ENERGY LLC	ARCO-STATE 2-1	Gas Well	Producing	EAST CANYON	GRAND	NESE	2	16S-24E	ML-22208	2420
43-019-30241-00-0	CRESCENDO ENERGY LLC	ARCO-STATE 2-2	Gas Well	Shut-In	EAST CANYON	GRAND	NWNW	2	16S-24E	ML-22208	1429
43-019-30047-00-0	CRESCENDO ENERGY LLC	BITTER CREEK 1	Gas Well	Producing	SAN ARROYO	GRAND	SWSE	2	16S-25E	ML-25151	1080
		BLACK HORSE CANYON FED 31-1	Gas Well	Producing	BLACK HORSE CYN	UINTAH	NWSW	31	15S-24E	U-14234	2030
	CRESCENDO ENERGY LLC	FEDERAL 174 1	Gas Well	Producing	SAN ARROYO	GRAND	SESW	11	16S-25E	U-126528	1940
43-019-31432-00-0	CRESCENDO ENERGY LLC	FEDERAL 27-2	Gas Well	Approved permit (APD); not yet spudde	SAN ARROYO	GRAND	SESE	27	16S-25E	U-29645	1110
	CRESCENDO ENERGY LLC	FEDERAL 47	Gas Well	Producing	SAN ARROYO	GRAND	NWNE	31	16S-26E	U-6023	990
	CRESCENDO ENERGY LLC	FEDERAL 6-1	Gas Well	Approved permit (APD); not yet spudd	SAN ARROYO	GRAND	SWNW	6	16S-25E	U-9831	1760
43-019-11089-00-0	CRESCENDO ENERGY LLC	FEDERAL GILBERT 1	Gas Well	Producing	SAN ARROYO	GRAND	SWNE	11	16S-25E	U-126528	
43-019-16532-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 01	Gas Well	Shut-In	SAN ARROYO	GRAND	SENW	26	16S-25E	1	1140
43-019-15885-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 02	Gas Well	Shut-In	SAN ARROYO	GRAND	SENW	22	16S-25E	USL-71307	1320
43-019-15886-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 03	Gas Well	Producing	SAN ARROYO	GRAND	SENW	23	16S-25E	U-370-A	1125
43-019-15887-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 04	Gas Well	Producing	SAN ARROYO	GRAND	SESW	30	165-25E	U-369	60
43-019-15888-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 05	Gas Well	Shut-In	SAN ARROYO	GRAND	NWSE	25		U-6023	660
43-019-15889-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 06	Gas Well	Shut-In	SAN ARROYO	GRAND	SWNE	21	165-25E	<u>U-369</u>	820
43-019-15890-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 08	Gas Well	Producing	SAN ARROYO	GRAND	SWSW	16	16S-25E	U-136529	1360
43-019-15891-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 09	Gas Well	Producing	SAN ARROYO	GRAND	NWNE	27	16S-25E	ML-4113	2066
43-019-15892-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 11	Gas Well	Producing	SAN ARROYO	GRAND	NESW	15	16S-25E	U-370-A	1210
43-019-15893-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 12	Gas Well	Producing	SAN ARROYO	GRAND	SWSW	23	16S-25E 16S-25E	U-5059-C	2450
43-019-15894-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 13	Gas Well	Producing	SAN ARROYO	GRAND	C-SW	22		USL-71307	1520
43-019-15896-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 16	Gas Well	Producing	SAN ARROYO	GRAND	SESW	26	16S-25E	U-370-A	660
43-019-15897-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 17	Gas Well	Producing	SAN ARROYO	GRAND	NENE	24	16S-25E	U-369	1990
43-019-15898-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 18	Gas Well	Producing	SAN ARROYO	GRAND	NWNW	30	16S-25E 16S-26E	U-25243	660
43-019-15899-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 19	Gas Well	Producing	SAN ARROYO	GRAND	SWSE	14	16S-25E	U-6023	1300
43-019-15900-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 20	Gas Well	Producing	SAN ARROYO	GRAND	SENE	26	16S-25E	U-5011-B	2600
43-019-15901-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 21	Gas Well	Producing	SAN ARROYO	GRAND	NWSE	25	16S-25E	USL-71307	1712
43-019-15902-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 22	Gas Well	Producing	SAN ARROYO	GRAND	NENE	15	16S-25E	U-369	395
43-019-15903-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 24	Gas Well	Producing	SAN ARROYO	GRAND	SENW	19	16S-26E	U-5011-A	2194
43-019-15904-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 25	Gas Weil	Producing	SAN ARROYO	GRAND	SWNE	21		U-6188	769
43-019-15905-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 26	Gas Well	Producing	SAN ARROYO	GRAND	SWSW	20	16S-25E	U-136529	1111
43-019-15906-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 27	Gas Well	Producing	SAN ARROYO	GRAND	NESW	29	16S-26E	U-25297	578
43-019-15907-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 28	Gas Well	Producing	SAN ARROYO	GRAND	NWNE	29	165-26E	U-6021	.787
43-019-15908-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 29	Gas Well	Producing	SAN ARROYO	GRAND	NENE	22	16S-26E 16S-25E	U-5650	634
43-019-15909-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 30	Gas Well	Producing	SAN ARROYO	GRAND	NWSW	21		U-370-A	540
43-019-30527-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 31	Gas Well	Shut-In	SAN ARROYO	GRAND	NWNW	22	16S-26E	U-5650	945
43-019-30528-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 32	Gas Well	Producing	SAN ARROYO	GRAND	SWSW	14		U-370-A	739
43-019-30608-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 33	Gas Well	Producing	SAN ARROYO	GRAND	SWSW	25		U-5011-B	1305
43-019-11090-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 35	Gas Well	Producing	SAN ARROYO	GRAND	SESW	24		U-369	1977
43-019-31251-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 36-A	Gas Well	Producing	SAN ARROYO	GRAND	SESE			U-369	1879
43-019-31252-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 37	Gas Well					19		U-6188	304
		SAN ARROYO 38	Gas Well		SAN ARROYO SAN ARROYO	GRAND	SWNE	20		U-5650	2025
	CRESCENDO ENERGY LLC	SAN ARROYO 40	Gas Well		SAN ARROYO	GRAND	SWNE	16		ML-4113	1391
	CRESCENDO ENERGY LLC	SAN ARROYO 41	Gas Well	Producing	SAN ARROYO	GRAND	NWNE	27	16S-25E	U-370-A	1482
	CRESCENDO ENERGY LLC	SAN ARROYO 42	Gas Well	Producing	SAN ARROYO	GRAND	NENE	36	165-25E	Not CE Lease	1342
	CRESCENDO ENERGY LLC	SAN ARROYO 43	Gas Well	Producing	SAN ARROYO	GRAND	NESE		16S-26E	U-6023	1300
		SAN ARROYO 44	Gas Well	Producing	SAN ARROYO	GRAND GRAND	NESE	29	165-26E	U-6021	600
		SAN ARROYO 45	Gas Well	Producing		<del></del>	SENE		16S-26E	U-6023	<del>   </del>
				, , outling	SAN ARROYO	GRAND	NWSE	20	16S-26E	U-5650	0

### UTAH SCHEDULE OF WELLS SLATE RIVER RESOURCES, LLC, OPERATOR

43-019-31316-00-0	CRESCENDO ENERGY LLC	SAN ARROYO 49	Gas Well	Producing	SAN ARROYO	GRAND	NENW	29	16S-26E	U 25245	7. 1
43-019-31414-00-0	CRESCENDO ENERGY LLC	SAN ARROYO U #50	Gas Well	New Permit (Not yet approved or drille		GRAND				U-25245	0
43-019-31425-00-0		SAN ARROYO U #51					NESE	16		ML-4113	<b></b>  •
				Approved permit (APD); not yet spudd		GRAND	NESW	15	165-25E	U-5059-C	0
<del></del>		SAN ARROYO U #52	Gas Well	Approved permit (APD); not yet spudde	SAN ARROYO	GRAND	SENW	26	16S-25E	USL-71307	0
43-019-31426-00-0	CRESCENDO ENERGY LLC	SAN ARROYO U #53	Gas Well	Approved permit (APD); not yet spudde	SAN ARROYO	GRAND	NWSE	22	16S-25E	U-370-A	0
43-019-31433-00-0	CRESCENDO ENERGY LLC	SAN ARROYO U #54	Gas Well	Approved permit (APD); not yet spudd	SAN ARROYO	GRAND	SESW	19		U-6188	1,
43-019-31430-00-0	CRESCENDO ENERGY LLC	SAN ARROYO U #55	Gas Well	Approved permit (APD); not yet spudde		GRAND	SENW	25		U-369	10
43-019-31428-00-0	CRESCENDO ENERGY LLC	SAN ARROYO U #56	Gas Well	Approved permit (APD); not yet spudde		GRAND	NESE	24	····	U-369	+
43-019-31429-00-0	CRESCENDO ENERGY LLC	SAN ARROYO U #58		Approved permit (APD); not yet spudde		GRAND	SESE	25		U-369	10
43-019-31427-00-0	CRESCENDO ENERGY LLC	SAN ARROYO U #59		Approved permit (APD); not yet spudd		GRAND	SESE	23			<del></del>
43-019-31411-00-0	CRESCENDO ENERGY LLC	STATE 2-3		Approved permit (APD); not yet spudd		GRAND	SENW	2		USL-71307	1820
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0.00	351444	-	103-245	ML-22208	
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#### STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

### Request to Transfer Application or Permit to Drill

(This form should accompany a Sundry Notice, Form 9, requesting APD transfer)

Well name:	San Arroyo Unit #59		
API number:	4301931427		
Location:	Qtr-Qtr: SESE Section: 23	Township: 16S	Range: 25E
Company that filed original application:	Crescendo Energy, LLC		
Date original permit was issued:	01/05/2005		
Company that permit was issued to:	Crescendo Energy, LLC		

Check one	Desired Action:
	Transfer pending (unapproved) Application for Permit to Drill to new operator
	The undersigned as owner with legal rights to drill on the property, hereby verifies that the information as submitted in the pending Application for Permit to Drill, remains valid and does not require revision. The new owner of the application accepts and agrees to the information and procedures as stated in the application.
1	Transfer approved Application for Permit to Drill to new operator
	The undersigned as owner with legal rights to drill on the property as permitted, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.	Yes	No
If located on private land, has the ownership changed?		
If so, has the surface agreement been updated?		
Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?		✓
Have there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?		✓
Have there been any changes to the access route including ownership or right-of-way, which could affect the proposed location?		1
Has the approved source of water for drilling changed?		✓
Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?		✓
Is bonding still in place, which covers this proposed well? Bond No. B001762	✓	

Any desired or necessary changes to either a pending or approved Application for Permit to Drill that is being transferred, should be filed on a Sundry Notice, Form 9, or amended Application for Permit to Drill, Form 3, as appropriate, with necessary supporting information as required.

RECEIVED

Name (please print) Bruce E. Johnston Signature	Title Vice President Lar	NOV 2 5 2005
Representing (company name) State River Resources, LL	.c	DIV. OF OIL, GAS & MINING

The person signing this form must have legal authority to represent the company or individual(s) to be listed as the new operator on the Application for Permit to Drill.

(3/2004)

### **OPERATOR CHANGE WORKSHEET**

ROUTING 1. DJJ 2. CDW

Change of Operator (Well Sold)

Designation of Agent/Operator

Operator Name Change

X Merger

The operator of the well(s) listed below has cha	e:		1	1/1/2005					
FROM: (Old Operator):	TO: ( New Operator):								
N1365-Crescendo Energy, LLC				N2725-Slate River Resources, LLC					
1600 Broadway, Suite 900				418 Ma	in St, Suite	18			
Denver, CO 80202				Vernal,	UT 84078				
Phone: 1-(303) 592-4448				Phone: 1-(435)	781-1870				
CA No.	,			Unit:		SAN A	RROYO		
WELL(S)					· · · · · · · · · · · · · · · · · · ·				
NAME	SEC	TWN	RNG	API NO	ENTITY	LEASE	WELL	WELL	
		<u> </u>	<u> </u>		NO	TYPE	TYPE	STATUS	
SAN ARROYO U #51	15	160S		4301931425		Federal	GW	APD	
SAN ARROYO U #50	16	160S		4301931414	<u> </u>	State	GW	NEW	
SAN ARROYO U #53	22	160S		4301931426		Federal	GW	APD	
SAN ARROYO U #59	23	160S		4301931427		Federal	GW	APD	
SAN ARROYO U #56	24	160S		4301931428		Federal	GW	APD	
SAN ARROYO U #58	25	160S		4301931429		Federal	GW	APD	
SAN ARROYO U #55	25	160S		4301931430		Federal	GW	APD	
SAN ARROYO U #52	26	160S		4301931431		Federal	GW	APD	
FEDERAL 27-2	27	160S		4301931432		Federal	GW	APD	
SAN ARROYO U #54	19	160S	260E	4301931433		Federal	GW	APD	
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							<del>                                     </del>	-	
OPERATOR CHANGES DOCUMENTATION	ON								
Enter date after each listed item is completed									
1. (R649-8-10) Sundry or legal documentation was rece	eived f	rom the	FORM	IER operator on	:	11/16/2005	5		
2. (R649-8-10) Sundry or legal documentation was reco	eived f	rom the	NEW	operator on:		11/16/2005	5		
3. The new company was checked on the Department	of Cor	nmerce	. Divisi	on of Corporati	ions Databa	ise on:		11/23/2005	
4. Is the new operator registered in the State of Utah:				Business Number		5830411-01	61		
5. If NO, the operator was contacted contacted on:				,			<del>-</del>		
62 (B640 0 2)West Marie 1						1/00/67			
6a. (R649-9-2)Waste Management Plan has been received					requested 1	1/23/05			
6b. Inspections of LA PA state/fee well sites complete or				n/a	•				
6c. Reports current for Production/Disposition & Sundrie	es on:				requested 1	1/23/05			

7.	7. Federal and Indian Lease Wells: The BLM and or the BIA has approved the merger, name change,			
	or operator change for all wells listed on Federal or Indian leases on:		_not yet	
8.	Federal and Indian Units:			
	The BLM or BIA has approved the successor of unit operator for well	ls listed on:	n/a	
9.	Federal and Indian Communization Agreements ("CA"	<b>'</b> ):		
	The BLM or BIA has approved the operator for all wells listed within	a CA on:	<u>n/a</u>	
10	· · · · · · · · · · · · · · · · · · ·		C Form 5, Transfer of Authority to Inject,	
	for the enhanced/secondary recovery unit/project for the water disposal	well(s) listed on:	n/a	
D	ATA ENTRY:			
1.	Changes entered in the Oil and Gas Database on:	11/29/2005	_	
2.	Changes have been entered on the Monthly Operator Change Spread Sheet on:		11/29/2005	
3.	Bond information entered in RBDMS on:	11/29/2005	_	
4.	Fee/State wells attached to bond in RBDMS on:	11/29/2005	_	
5.	Injection Projects to new operator in RBDMS on:	n/a	_	
6.	Receipt of Acceptance of Drilling Procedures for APD/New on:		11/29/2005	
FI	EDERAL WELL(S) BOND VERIFICATION:			
1.	Federal well(s) covered by Bond Number:	UTB000187	_	
IN	DIAN WELL(S) BOND VERIFICATION:			
1.	Indian well(s) covered by Bond Number:	n/a	_	
F	EE & STATE WELL(S) BOND VERIFICATION:			
1.	. (R649-3-1) The NEW operator of any fee well(s) listed covered by Bond Number		B001556	
2.	The FORMER operator has requested a release of liability from their bo		11/25/2005	
	The Division sent response by letter on:	n/a	_	
	EASE INTEREST OWNER NOTIFICATION:			
3.	(R649-2-10) The <b>FORMER</b> operator of the fee wells has been contacted		a letter from the Division	
	of their responsibility to notify all interest owners of this change on:	n/a	_	
CC	DMMENTS:			
_				

United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155
http://www.blm.gov

165 25E 23

IN REPLY REFER TO: 3106 (UT-922)

December 5, 2005

Memorandum

To:

Moab Field Office

From:

Acting Chief, Branch of Fluid Minerals

Subject:

Merger Approval

Attached is an approved copy of the merger recognized by the state of Delaware. We have updated our records to reflect the merger from Crescendo Energy LLC into Slate River Resources LLC. The merger was approved effective October 31, 2005.

for

David H. Murphy

Acting Chief, Branch of

Fluid Minerals

Enclosure

Articles of Organization (4 pp)

cc:

MMS, Reference Data Branch, James Sykes, PO Box 25165, Denver CO 80225

State of Utah, DOGM, Attn: Earlene Russell, PO Box 145801, SLC UT 84114

Teresa Thompson Joe Incardine

G : G

Connie Seare

Dave Mascarenas

Susan Bauman

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DEC 0 8 2005

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LLE: Judy Nordstrom	MEMO WRITTEN: <u>December 5, 2005</u>			
Name of Company:				
OLD	<u>NEW NID</u>			
Crescendo Energy LLC	Slate River Resources LLC			
418 E. Main Street	1600 Broadway			
Suite 18	Suite 900			
Vernal Utah 84078	Denver CO 80202			
********	*****************			
	(940) NAME CHANGE RECOGNIZED			
(DATE)				
October 31, 2005	(817) CORPORATE MERGER RECOGNIZED			
(DATE)				
*********	******************			
UTSL-071307				
UTU-0369				
UTU-0370A				
UTU-05011A				
UTU-05011B				
UTU-05059A				
UTU-05059C				
UTU-05059F				
UTU-05650				
UTU-05650A				
UTU-06021				
UTU-06023				
UTU-06188				
UTU-06188B				
UTU-025243				
UTU-025245				
UTU-025243A				
UTU-025297				
UTU-0126528				
UTU-0136529				
UTU-0141420				
UTU-9831				
UTU-14234				
UTU-29645				
UTU-60818				
UTU-63022A				

# CERTIFICATE OF MERGER of CRESCENDO ENERGY, LLC into SLATE RIVER RESOURCES, LLC

This CERTIFICATE OF MERGER, dated and effective as of October 31, 2005, has been duly authorized and is filed pursuant to Section 18-209 of the Delaware Limited Liability Company Act (the "Act").

1. The name and jurisdiction of formation or organization of the constituent entities of the merger effectuated hereby are:

Name Jurisdiction of Organization
Slate River Resources, LLC Delaware

Crescendo Energy, LLC Delaware

2. An Agreement and Plan of Merger (the "Merger Agreement") has been duly authorized, approved and executed by each of the limited liability companies to merge pursuant hereto.

- 3. Slate River Resources, LLC shall be the surviving entity and shall maintain its present name.
- 4. There are no amendments to the certificate of formation of Slate River Resources, LLC resulting from or incidental to the merger.
- 5. The merger effected hereby shall be effective upon the filing of this Certificate of Merger in the office of the Secretary of State of the State of Delaware.
- 6. The Merger Agreement is on file in the principal business office of the surviving entity, Slate River Resources, LLC, which is located at 1600 Broadway, Suite 900, Denver, Colorado 80202.
- 7. The Merger Agreement will be furnished by Slate River Resources, LLC, or its authorized representative, free of cost, to any member of, or any person holding an interest in, any entity to be merged pursuant hereto.

IN WITNESS WHEREOF, Slate River Resources, LLC, the surviving entity, has caused this Certificate of Merger to be executed by an authorized officer as of the date first written above.

SLATE RIVER RESOURCES, LLC

By:

Carter G. Mathies Chief Executive Officer

### SLATE RIVER HOLDINGS, LLC UNANIMOUS WRITTEN CONSENT OF THE BOARD OF DIRECTORS IN LIEU OF A SPECIAL MEETING

The undersigned, being all of the Members of the Board of Directors of Slate River Holdings, LLC, a Delaware limited liability company (the "Company"), hereby adopt, by unanimous written consent, in accordance with the Delaware Limited Liability Company Act, the following resolutions with the same force and effect as if they had been adopted at a duly convened meeting of the Board:

WHEREAS, the Company previously acquired all of the outstanding equity and ownership interests in Crescendo Resources, LLC ("Crescendo Resources"); and

WHEREAS, thereafter, the Company consolidated all of the wholly-owned subsidiaries of Crescendo Resources, namely, Crescendo Energy, LLC ("Crescendo Energy") and Entrada Energy Ventures, LLC ("Entrada") (collectively, Crescendo Resources, Crescendo Energy and Entrada are referred to herein as the ("Crescendo Entities") into Crescendo Energy; and

WHEREAS, the material assets and operations of all of the Crescendo Entities are held by Crescendo Energy; and

WHEREAS, Slate River Resources, LLC ("Slate River Resources"), a wholly-owned subsidiary of the Company, is intended to be the operating entity for all of the Company's business activities; and

WHEREAS, the Company has determined that it is in the Company's best interest to operate all of its business activities as a single entity and therefore to merge Crescendo Energy into Slate River Resources, with Slate River Resources being the surviving entity.

### NOW, THEREFORE, BE IT:

**RESOLVED**, that the Company hereby is authorized to direct its legal counsel to effectuate the merger of the Crescendo Energy into Slate River Resources, with Slate River Resources as the surviving entity, to be effective on October 31, 2005; and be it further

RESOLVED, that the Company, and any Authorized Officer (as defined below) on behalf of the Company, hereby is authorized to undertake and perform all other acts, transactions or agreements that are necessary, appropriate, desirable or contemplated by the foregoing Resolutions; and be it further

RESOLVED, that all of the acts, transactions, or agreements taken in connection with the foregoing Resolutions hereby are ratified and approved in all respects, and the chief executive officer, chief operating officer, chief financial officer, president, vice president and secretary of the Company, as applicable, (collectively, the "Authorized Officers" and each individually, an "Authorized Officer") hereby are severally authorized and directed, in the name and on behalf of the Company to negotiate, execute and deliver such instruments, documents, agreements and writings of every kind and character, together with such changes, modifications, additions and deletions as to any or all of the terms and provisions thereof as the Authorized Officer executing such instruments, documents, agreements and

writings shall deem proper (such execution by such Authorized Officer to be conclusive evidence that such Authorized Officer deems all of the terms and provisions thereof to be proper), and to make such attestations to any signatures of officers of the Company, and to do and perform or cause to be done and performed all such other acts as each Authorized Officer shall from time to time deem necessary, advisable or appropriate in order to consummate the acts, transactions, or agreements contemplated by or described in the foregoing Resolutions; and be it further

RESOLVED, that the Authorized Officers hereby are severally authorized to execute on behalf of the Company from time to time, amendments or supplements to any of the documents related to or contemplated by the foregoing Resolutions as the Authorized Officer or Authorized Officers executing and delivering the same may in his, her, or their sole and absolute discretion deem appropriate to carry out the purpose and intent of the foregoing Resolutions (such execution by such Authorized Officer or Authorized Officers to be conclusive evidence that such Authorized Officer or Authorized Officers deems all of the terms and provisions thereof to be proper); and be it further

**RESOLVED**, that all acts, transactions, or agreements undertaken prior to the adoption of these Resolutions by any of the officers or representatives of the Company in connection with the foregoing matters hereby are ratified, confirmed and adopted by the Board; and be it further

**RESOLVED**, that any Authorized Officer hereby is authorized and directed to certify these Resolutions; and be it further

RESOLVED, that the Authorized Officers (together with such other officers and employees of the Company under their supervision as any of them shall direct) hereby are severally authorized and directed in the name and on behalf of the Company to do or cause to be done any and all further acts and things that they may from time to time deem necessary, advisable or appropriate to carry out the purpose and intent of the foregoing Resolutions.

[Remainder of Page Intentionally Left Blank]

PAGE 1

### The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF FORMATION OF "SLATE RIVER RESOURCES, LLC", FILED IN THIS OFFICE ON THE TWENTY-EIGHTH DAY OF JANUARY, A.D. 2005, AT 9:34 O'CLOCK P.M.

300 mm - 7 / 11 9:50



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Darriet Smith Windson

Harriet Smith Windsor, Secretary of State

AUTHENTICATION: 3651875

DATE: 01-31-05



Department of Natural Resources

MICHAEL R. STYLER Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA Division Director JON M. HUNTSMAN, JR. Governor

GARY R. HERBERT Lieutenant Governor

January 31, 2006

Ginger Stringham Slate River Resources, LLC 418 Main St, Suite 18 Vernal, Utah 84078

Re: APD Rescinded -San Arroyo Unit #59 Sec. 23, T. 16S R. 25E Grand County, Utah API No. 43-019-31427

Dear Ms. Stringham:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on January 5, 2005. On January 30, 2006 you requested that the division rescind the state approved APD.

No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective January 30, 2006.

A new APD must be filed with this office for approval <u>prior</u> to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Whitney

**Engineering Technician** 

cc: Well File

Bureau of Land Management, Moab